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MORGAN, LEWIS & BOCKIUS LLP (SF)
One Market, Spear Street Tower, Suite 2800
San Francisco, CA 94105

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte SHEKHAR YADAV

Appeal 2015-007596
Application 12/415,832¹
Technology Center 3600

Before HUBERT C. LORIN, CYNTHIA L. MURPHY, and
ROBERT J. SILVERMAN, Administrative Patent Judges.

LORIN, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Shekhar Yadav (Appellant) seeks our review under 35 U.S.C. § 134 of the final rejection of claims 1–3, 12, and 16–72. We have jurisdiction under 35 U.S.C. § 6(b).

SUMMARY OF DECISION

We AFFIRM.

¹ The Appellant identifies Strongview Systems, Inc., as the real party in interest. App. Br. 4.

THE INVENTION

Claim 1, reproduced below, is illustrative of the subject matter on appeal.

1. A method of optimizing a response of a computer based digital message campaign using computer based processing, the method comprising:

(A) electronically accessing a first plurality of digital message addresses of a first plurality of targeted recipients from one or more data structures containing digital message addresses of said first plurality of targeted recipients;

(B) creating a first plurality of digital messages, each digital message in the first plurality of digital messages comprising a plurality of elements independently selected from a library of elements based on one or more campaign rules, wherein

a first digital message in the first plurality of digital messages comprises a first plurality of elements independently selected from the library of elements based upon the one or more campaign rules for the computer based digital message campaign,

a second digital message in the first plurality of digital messages comprises a second plurality of elements independently selected from the library of elements based upon the one or more campaign rules, and

at least one element in the first plurality of elements is not in the second plurality of elements or at least one element in the second plurality of elements is not in the first plurality of elements;

(C) sending said first plurality of digital messages from a server over an electronic network to said first plurality of digital message addresses of said first plurality of targeted recipients, wherein

said first digital message is sent to a first digital message address in said first plurality of digital message addresses, and

said second digital message is sent to a second digital message address in said first plurality of digital message addresses,

(D) electronically tracking at least one selected response event occurring after said first plurality of digital messages is sent to said first plurality of digital message addresses of said first plurality of targeted recipients;

(E) segmenting the library of elements based upon one or more relationships between (i) differences in usages of elements in the first plurality of digital messages and (ii) the at least one selected response event, thereby discovering a relationship result;

(F) modifying, without human intervention, at least one of the one or more campaign rules based upon the relationship result;

(G) electronically accessing a second plurality of digital message addresses of a second plurality of targeted recipients from one or more data structures containing digital message addresses of said second plurality of targeted recipients;

(H) creating a second plurality of digital messages, each digital message in the second plurality of digital messages comprising a plurality of elements independently selected from the library of elements based on the one or more campaign rules as modified by the modifying (F); and

(I) sending said second plurality of digital messages from a server over an electronic network to said second plurality of digital message addresses of said second plurality of targeted recipients, wherein

the relationship result is a correlation between (i) the usage of a first combination of elements in the first plurality of digital messages, the first combination of elements comprising a first element and a second element, and (ii) performance in the selected response event, wherein the relationship result is used to establish a correlation between the first and second element; and

the modifying (F) comprises modifying a campaign rule in the one or more campaign rules based on the correlation between the first and second elements so that the campaign rule specifies a new frequency of incorporation of the first combination of elements in a plurality of digital messages, wherein the new frequency is higher or lower than an original frequency of incorporation of the first

combination of elements in a plurality of digital messages specified by the campaign rule before the modifying (F), thereby causing the first combination of elements to be present in a higher or lower percentage of the second plurality of digital messages than in the first plurality of digital messages.

THE REJECTIONS

The Examiner relies upon the following as evidence of unpatentability:

Phelan et al.,	US 2004/0093296 A1	May 13, 2004; hereinafter “Phelan”
Wardell	US 2006/0047563 A1	Mar. 2, 2006
Thomas	US 2006/0253537 A1	Nov. 9, 2006
Chang et al.,	US 2008/0281627 A1	Nov. 13, 2008; hereinafter “Chang”

The following rejections are before us for review:

1. Claims 1–3, 12, and 16–72² are rejected under 35 U.S.C. § 101 as being directed to non–statutory subject matter. (Ans. 104–108).
2. Claims 1–3, 16–21, 28, 29, 32–35, and 37–72 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Thomas and Chang. (Ans. 3–84).
3. Claims 12, 22–27, 30, and 31 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Thomas, Chang, and Wardell. (Ans. 84–102).

² Herein, we refer to the Specification filed Jan. 31, 2009 (“Spec.”); Final Office Action mailed June 3, 2014 (“Final Act.”); Appeal Brief filed Feb. 3, 2015 (“App. Br.”); the Examiner’s Answer mailed June 17, 2015 (“Ans.”); and the Reply Brief filed Aug. 17, 2015 (“Reply Br”).

4. Claim 36 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Thomas, Chang, Wardell, and Phelan. (Ans. 102–104).

ISSUES

Did the Examiner err in rejecting claims 1–3, 12, and 16–72 under 35 U.S.C. § 101 as being directed to non–statutory subject matter?

Did the Examiner err in rejecting claims 1–3, 16–21, 28, 29, 32–35, and 37–72 under 35 U.S.C. § 103(a) as being unpatentable over Thomas and Chang?

Did the Examiner err in rejecting claims 12, 22–27, 30, and 31 under 35 U.S.C. § 103(a) as being unpatentable over Thomas, Chang, and Wardell?

Did the Examiner err in rejecting claim 36 under 35 U.S.C. § 103(a) as being unpatentable over Thomas, Chang, Wardell, and Phelan?

ANALYSIS

The rejection of claims 1–3, 12, and 16–72 under 35 U.S.C. § 101 as being directed to non–statutory subject matter.

The Appellant argued these claims as a group. *See* Reply Br. 6–13. We select claim 1 as the representative claim for this group, and the remaining claims 2, 3, 12, and 16–72 stand or fall with claim 1. 37 C.F.R. § 41.37(c)(1)(iv).

Alice Corp. Proprietary Ltd. v. CLS Bank International, 134 S. Ct. 2347 (2014) identifies a two-step framework for determining whether claimed subject matter is judicially-excepted from patent-eligibility under 35 U.S.C. § 101.

According to *Alice* step one, “[w]e must first determine whether the claims at issue are directed to [a] patent-ineligible concept[s],” such as an abstract idea. *Alice*, 134 S. Ct. at 2355.

In that regard, the Examiner determined that

[c]laim(s) 1–3, 12, 16–53, 60–66, and 72 are directed to a method, claims 54, 56, 57, 67, and 69 are directed to a computer program product, and claims 55, 58, 59, 68, 70, and 71 are directed to a system and series of steps for optimizing a computer based digital message campaign ... which is a fundamental economic practice, as well as a method of mathematical formulas/relationships (algorithms) and organizing human activities, and thus an abstract idea of optimizing a digital message campaign and providing for target population discovery and/or validation based on an evaluation of user activity. Additionally, the courts have recognized similarly directed claims of the use of a computer employed for the performance of calculations (Bancorp), using a computer to send and receive information (buySAFE), and transmitting information (Cyberphone [*sic*, Cyberfone]) all are directed to abstract ideas. Also, the steps of the claims could be performed through the use of organized human activities given enough time. ... Additionally, the claims are directed to an abstract idea of optimizing a digital message campaign and providing for target population discovery and/or validation based on an evaluation of user activity

Ans. 105–107.

The Appellant does not appear to dispute the Examiner’s characterization of the claimed concept as being directed to an abstract idea. Accordingly, the Appellant has not shown error in the Examiner’s determination under step one of *Alice* that the claims are directed to an abstract idea.

Step two is “a search for an ‘inventive concept’—*i.e.*, an element or combination of elements that is ‘sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the [ineligible

concept] itself.”” *Alice*, 134 S. Ct. at 2355 (quoting *Mayo*, 566 U.S. at 72–73).

In that regard, the Examiner determined

[t]he claims do not include additional elements that are sufficient to amount to significantly more than the judicial exception because the claims do not provide improvements to another technology or technical field, improvements to the functioning of the computer itself, and do not provide meaningful limitations beyond general linking the use of an abstract idea to a particular technological environment. ... [A]dditional generic computer elements (Specification—page 13, line 18—page 16, line 8 and Fig. 3) [] do not add meaningful limitations to the abstract idea because they require no more than a generic computer, a network, and software to perform generic computer, network, and software functions that are well-understood, routine, and conventional activities previously known to the industry.

Ans. 107.

The Appellant argues that

[e]ven if the pending claims are directed to an abstract idea as apparently alleged in the Examiner's Answer—which is not conceded—the pending claims would still be patentable because they do not preempt essentially all uses of the abstract idea. Instead, the pending claims: (1) improve the function of delivering digital message campaigns, (2) add limitations other than what is well-understood, routine and conventional in the field; and (3) amount to significantly more than the (alleged) abstract idea itself. See *Alice* Guidelines at 74624 (parenthetical added).

Reply Br. 7. In an effort to show that claim 1 on appeal is patent-eligible, claim 1 is compared to claim 2 of Example 21 of the July 2015 Update Appendix 1 of the *2014 Interim Guidance Matter Eligibility*, which was found to be patentable under 35 U.S.C. § 101 in *Google Inc. v. Simpleair, Inc.*, Covered Business Method Case No. CBM 2014–00170 (Jan. 22, 2015) (hereinafter "Example 21").

Id. For doing so, a table is provided that corresponds the limitations of claim 1 and those of claim 2 of Example 21. Ans. 7–10 and 10–12.

Claim 2 of Example 21 of the July 2015 Update Appendix 1 of the *2014 Interim Guidance Matter Eligibility* is not a strong basis for arguing that claim 1 on appeal is patent-eligible.

First, claim 2 of Example 21 is a hypothetical claim, not an actual claim present in US 7,035,914 B1 that was at issue in *Google Inc. v. Simpleair, Inc.*, Covered Business Method Case No. CBM 2014-00170 (Jan. 22, 2015).

Second, contrary to the Appellant's statement, the Board did not hold a claim like claim 2 of Example 21, or any claim in US 7,035,914 B1 for that matter, patent-eligible as a matter of law. Rather, the Board found that the Petitioner had not "shown sufficiently that claims 1–3, 7, and 22–24 [of US 7,035,914 B1] are more likely than not unpatentable as being directed to patent-ineligible subject matter under 35 U.S.C. § 101." *Id.* at 16. ("Petitioner's generalized arguments, not directed to the specific language of the challenged claims, are insufficient to show that the claims more likely than not are directed to a patent-ineligible abstract idea.")

Third, be that as it may, claim 2 of Example 21 is not comparable to what is claimed. Claim 2 of Example 21 includes the limitation "[an] alert [which] activates [a] stock viewer application to cause the stock quote alert to display on the remote subscriber computer and to enable connection via the URL to the data source over the Internet when the wireless device is locally connected to the remote subscriber computer and

the remote subscriber computer comes online.” Claim 1 on appeal contains no comparable limitation.

Fourth, reliance on examples in USPTO guidance is problematic at best. The Board decides cases in accordance with the law, not in accordance with hypothetical “examples [] intended to be illustrative only” (page 1 of July 2015 Update).

Finally, with regard to the law, we note that the Examiner cited three decisions showing that “the courts have recognized similarly directed claims ... are directed to abstract ideas” (Ans. 107): *Bancorp Servs., L.L.C., v. Sun Life Assurance Co. of Can.*, 687 F.3d 1266 (Fed. Cir. 2012); *BuySAFE, Inc. v. Google, Inc.*, 765 F.3d 1350 (Fed. Cir. 2014); and, *Cyberfone Sys., LLC v. CNN Interactive Grp., Inc.*, 558 F. App’x 988 (Fed. Cir. 2014) (nonprecedential). This is consistent with the current decisional mechanism courts now apply. *See Amdocs (Israel) Limited v. Openet Telecom, Inc.*, 841 F.3d 1288, 1294 (Fed. Cir. 2016) (“Instead of a definition [for what an ‘abstract idea’ encompasses], then, the decisional mechanism courts now apply is to examine earlier cases in which a similar or parallel descriptive nature can be seen—what prior cases were about, and which way they were decided.”) The Appellant has not addressed these decisions.

The question is not whether claim 1 is similar to a hypothetical claim the USPTO might consider to be patent-eligible but whether claim 1 includes an element or combination of elements sufficient to ensure that the claim 1 subject matter in practice amounts to significantly more than to be about the abstract idea that the Examiner determined the claim to be directed to (i.e., "optimizing a digital message campaign and providing for target

population discovery and/or validation based on an evaluation of user activity").

More specifically, the question is whether the claims as a whole “focus on a specific means or method that improves the relevant technology” or are “directed to a result or effect that itself is the abstract idea and merely invoke[s] generic processes and machinery.” *McRO, Inc. v. Bandai Namco Games Am. Inc.*, 837 F.3d 1299, 1314 (Fed. Cir. 2016). It is “relevant to ask whether the claims are directed to an improvement in computer functionality versus being directed to an abstract idea, even at the first step of the Alice analysis.” *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1335 (Fed. Cir. 2016).

The Appellant argues that "claim 1 solves a problem that is necessarily rooted in computer technology." Reply Br. 12. "[T]he claim solves an Internet-centric problem with a claimed solution that is necessarily rooted in computer technology, similar to the additional elements in *DDR Holdings*." Reply Br. 12.

However, claim 1 calls for using a "computer," and provides no further details. Reasonably broadly construed, the computer technology recited in claim 1 covers generic computers. And the tasks recited in claim 1 — such as accessing addresses, creating a message, sending a message from a server over a network to addresses, and tracking responses — are common computer functions. “Taking the claim elements separately, the function performed by the computer at each step of the process is ‘[p]urely conventional.’” *Alice*, 134 S. Ct. at 2359 (citing *Mayo*, 132 S. Ct. at 1298).

The Specification supports the view that the method of claim 1 uses conventional generic systems. See the BACKGROUND OF THE INVENTION (Specification 1–6) which describes conventional computer systems employed by the invention.

The Specification does not adequately support the Appellant's argument that the invention solves a computer problem. The invention is disclosed as seeking to optimize "the success of an e-mail campaign" while still using the same computer technology already known in the art. *See* Specification 6:2. Computer technology is used but it is not the heart of the claimed invention. The heart of the claimed invention is a scheme for improving the informational content that is otherwise conventionally electronically communicated. *Cf. Intellectual Ventures I LLC v. Erie Indemnity Company*, 850 F.3d 1315, 1328 (Fed. Cir. 2017) ("the heart of the claimed invention lies in creating and using an index to search for and retrieve data ... an abstract concept.") In fact, that is what the Appellant actually discusses; i.e., the scheme rather than computer technology. (*See* Reply Br. 12–13.) The Appellant reproduces steps recited in claim 1 which when performed, in part, correlates the response to a first plurality of digital messages with elements and discovers a relationship result and modifies a rule based on it; in addition, it segments a library of elements based on the relationship result, and creates a second plurality of digital messages with elements selected from the library based on the modified rule. But this scheme does not add significantly more to the abstract idea of "optimizing a digital message campaign and providing for target population discovery

and/or validation based on an evaluation of user activity" (Ans. 106–107).

The abstract idea does not become any less abstract.

The record does not adequately support the Appellant's argument that claim 1 "recites additional limitations that when considered as an ordered combination demonstrates a technologically rooted solution to an Internet-centric problem and thus amounts to significantly more than comparing and organizing information for transmission." Reply Br. 13. Neither the plain terms of the claim nor claim 1 as a whole in light of the Specification supports the Appellant's view that the claim 1 recites additional limitations for solving a problem that is necessarily rooted in computer technology. "Considered 'as an ordered combination,' the computer components of petitioner's method 'ad[d] nothing . . . that is not already present when the steps are considered separately.'" *Alice*, 134 S. Ct. at 2359. *See also English, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1335–36 (Fed. Cir. 2016) ("whether the focus of the claims is on the specific asserted improvement in computer capabilities ... or, instead, on a process that qualifies as an 'abstract idea' for which computers are invoked merely as a tool.") *Cf. Credit Acceptance Corp. v. Westlake Services, LLC*, 859 F.3d 1044, 1057 (Fed. Cir. 2017):

Significantly, the claims do not provide details as to any non-conventional software for enhancing the financing process. *Intellectual Ventures I LLC v. Capital One Fin. Corp.*, 850 F.3d 1332, 1342 (Fed. Cir. 2017) (explaining that "[o]ur law demands more" than claim language that "provides only a result-oriented solution, with insufficient detail for how a computer accomplishes it"); *Elec. Power Grp.*, 830 F.3d at 1354 [*Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1354 (Fed. Cir. 2016)]; (explaining that claims are directed to an abstract idea where they do not recite "any particular assertedly inventive technology for performing [conventional] functions").

Because the Appellant has not persuasively shown claim 1 includes an element or an ordered combination of elements sufficient to ensure that claim 1 in practice amounts to significantly more than to be on an abstract idea, the rejection is sustained.

The rejection of claims 1–3, 16–21, 28, 29, 32–35, and 37–72 under 35 U.S.C. § 103(a) as being unpatentable over Thomas and Chang.

The Appellant argues that independent claims 1, 50, 54–55, and 60, and consequently dependent claims 2–3, 32–35, 37–48, 61, 63, 67–68, and 72 as well, include, a claim limitation involving a “relationship result” which Thomas does not disclose as the Examiner alleges. App. Br. 54. We agree.

Independent claim 1 recites that the relationship result “is a correlation between (i) [a] usage of a first combination of elements in the first plurality of digital messages, [a] first combination of elements comprising a first element and a second element, and (ii) performance in [a] selected response event,” and “is used to establish a correlation” between the first and second elements (claim 1). The Examiner found said claim limitation disclosed in paras. 13–15, 19, 22–27, and 68–71 of Thomas. Final Act. 11. Said passages are reproduced in the Appeal Brief at pages 55–59. According to the Examiner,

Note: Thomas specifically teaches: "This is accomplished by constantly comparing observed conversion or other response statistics for messages with different message or content elements against a database of rules that indicates at what threshold changes or version substitutions need to be made. Alternatively the system can use software algorithms to alter message or content elements dynamically, measure conversion or other response statistics and

make decisions on changing message or content elements or switch versions [0022]... Modification of the content will automatically occur when the rules based software detects selected conversion events reaching a prescribed threshold or comparing conversion events among selected recipients. At step 107, the email server sends the modified marketing message in an email to recipients in other portions of the list [0070]." Thus is teaching a relationship that can be established based on one or more elements – correlation between the first and second element in its broadest reasonable interpretation.

Ans. 11.

We have reviewed said cited passages, but do not find there, the claim limitation at issue.

The Examiner reasons that Thomas "teach[es] a relationship that can be established based on one or more elements [and a] correlation between the first and second element [given the claim's] broadest reasonable interpretation" (Ans. 11).

But this is a matter of speculation. Also, the question is not whether Thomas discloses a relationship based on one or more elements and a correlation between a first and second element. The question is whether one of ordinary skill in the art given Thomas would have been led to use a relationship result to establish a correlation between a first and second element, where the "relationship result is a correlation between (i) [a] usage of a first combination of elements in the first plurality of digital messages, [a] first combination of elements comprising a first element and a second element, and (ii) performance in [a] selected response event" (claim 1). This has not been established by a preponderance of the evidence. Accordingly, a prima facie case of obviousness for the claimed subject matter has not been

established in the first instance and thus the rejection of claims 1–3, 32–35, 37–48, 50, 54–55, 60, 61, 63, 67–68, and 72 is not sustained.

The Appellant argues that independent claims 16, 19, 49, 51–53, and 56–59, and consequently dependent claims 17–18, 20–21, 28–29, 62, 64–66, and 69–71 as well, include, in part, the claim limitation

determining whether (i) a variation in the presence or absence of a first element across the first plurality of digital messages and (ii) a variation in the performance of the at least one selected response event across the first plurality of targeted recipients are correlated conditional on a variation in the one or more demographics across the first plurality of targeted recipients,

which the cited prior art does not disclose as the Examiner alleges. App. Br. 60. We agree.

The Examiner cites paras. 13–27 and 68–72 of Thomas as disclosing all that the claim limitation describes but for "demographics" for which Chang is relied upon. Ans. 17–18. "Chang teaches to using demographics as a limiter in optimizing email advertising or marketing [See 0006–0015, 0021–0030]." Ans. 16.

We agree with the Appellant that "'teaching demographics as a limiting factor" is very different from determining whether a variation of [*sic*, the first] variable and a variation of a second variable are correlated conditional on the variation of one or more demographics." App. Br. 62. Modifying Thomas to use demographics as a limiter in optimizing email advertising or marketing as Chang discloses would not have led one of ordinary skill in the art to make a correlation as claimed "conditional on a variation in the one or more demographics across the first plurality of targeted recipients" (claim 16).

The rejection of claims 16–21, 28, 29, 49, 51–53, 56–59, 62, 64–66, and 69–71 is not sustained.

The rejection of claims 12, 22–27, 30, and 31 under 35 U.S.C. § 103(a) as being unpatentable over Thomas, Chang, and Wardell.

The rejection of claim 36 under 35 U.S.C. § 103(a) as being unpatentable over Thomas, Chang, Wardell, and Phelan.

Independent claims 22 and 25 include limitations to making a correlation "conditional on a variation in the one or more demographics across the first plurality of targeted recipients." Their rejection is not sustained for the same reason discussed above in not sustaining the rejection of, for example, claim 16. The other claims here rejected are dependent claims. Their rejection is not sustained for the reasons given in not sustaining the rejections of the corresponding independent claims from which they depend.

CONCLUSIONS

The rejection of claims 1–3, 12, and 16–72 under 35 U.S.C. § 101 as being directed to non–statutory subject matter is affirmed.

The rejection of claims 1–3, 16–21, 28, 29, 32–35, and 37–72 under 35 U.S.C. § 103(a) as being unpatentable over Thomas and Chang is reversed.

The rejection of claims 12, 22–27, 30, and 31 under 35 U.S.C. § 103(a) as being unpatentable over Thomas, Chang, and Wardell is reversed.

The rejection of claim 36 under 35 U.S.C. § 103(a) as being unpatentable over Thomas, Chang, Wardell, and Phelan is reversed.

DECISION

The decision of the Examiner to reject claims 1–3, 12, and 16–72 is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a). *See* 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED